REMARKS

Reconsideration and allowance are respectfully requested in view of the following remarks.

By this amendment, claims 1 and 3-6 are amended. No new matter has been added. Accordingly, claims 1-6 are pending in the present application.

Claim Rejection Under 35 U.S.C. § 112, First Paragraph

Claims 1-6 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. The rejection is traversed as follows.

Claim 1 recites a method of managing an original executable code forming a program to be downloaded into a reprogrammable on-board computer system in a microprocessor card, the method comprising, *inter alia*,

> - off card:
>> -calculating a software component according to the original intermediate code and the corresponding modified intermediate code identified for the predefined specific use, the software component, when applied to the original code, making it possible to produce the modified code.

In numbered paragraph 3 of the Office Action, the Examiner requests Applicants to clarify the terms "software component CL" and "supplementary software component CL" in the written description. The Examiner also requests clarification as to which portion of the specification provides support for the above-claimed step that is performed off-card.

The word "supplementary" is used because the software component CL is added to the original intermediate code CI. The specification, for example at page 10, the first full paragraph, describes downloading the original intermediate code CI

"and adding to it a software component CL..." The word "supplementary" is used in the following paragraph to describe this relationship between the software component CL and the original intermediate code CI. This point is further supported in the specification, for example, in page 11, the first full paragraph which recites "the original intermediate code CI and the associated component CL," and in page 13, the third full paragraph, which provides downloading of an original executable code, and associated software component. Accordingly, "supplementary software CL" is synonymous with "software component CL." Note that the reference symbol "CL" is used consistently to represent this component.

Moreover, according to the specification, the supplementary software component CL is to be applied to a signed original intermediate code CI. See specification: page 10, the first sentence of the second full paragraph. The specification also provides that the software component CL is applied to the original intermediate code. See the specification at page 10, the first sentence of the second full paragraph. Thus, it is further evidenced in the specification that "the supplementary software CL" and the "software component CL" are synonymous to indicate the software component that is downloaded with the original intermediate code.

Since "supplementary software CL" is synonymous with "software component CL," the step of off-card calculation of the software component is supported in at least page 10, the second full paragraph of the specification, which provides that "the supplementary software CL to be applied to the signed original intermediate code CI is calculated off the card according to the original intermediate code CI and the corresponding modified intermediate code, identified for a predefined specific use."

Accordingly, it is respectfully submitted that, when the specification is read as a whole, the meaning of the terms is clear, and the claimed off-card steps are fully disclosed.

In numbered paragraph 5 of the Office Action, the Examiner asserts that the recitation "modified executable code" in line 8 of claim 1 lacks antecedent basis.

Claim 1 recites "a modified executable code" for the first time in line 8 of claim 1. Applicants submit that this introduction of "a modified executable code" (as opposed to "the modified executable code") is not required to have prior antecedent basis. If this ground of rejection is not withdrawn, the examiner is requested to explain why the noted term is deemed to lack proper antecedent basis, and/or indicate how the claim could be amended to remove the examiner's concern.

Claim Rejection Under 35 U.S.C. § 112, Second Paragraph

In numbered paragraph 6 of the Office Action, claim 1 is rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. The rejection is traversed as follows.

The Examiner asserts that the method step off card does not clearly show how the modified executable code is being generated before it is identified. Further, the Examiner asserts that the step generating the modified executable code is omitted from the claim. The Examiner requests clarification how the modified executable code is being generated before it is identified off card.

For clarification, claim 1 is amended to recite

- identifying a modified executable code that is adapted to a predefined specific use, and corresponds to the original code, and
-calculating a software component according to the original intermediate code and the corresponding modified intermediate

code identified for the predefined specific use, the software component, when applied to the original code, making it possible to produce the modified code.

The rejection appears to be based on a misunderstanding of the invention. There is no requirement that the modified executable code be generated before it is identified off-card. In other words, the "modified executable code" may be identified without being generated.

For example, in the paragraph bridging pages 10 and 11 of the specification, it is provided that the "modified executable code" is identified as a code adapted to a predefined specific use consisting of a priori satisfying a verification criteria for a verification process. For example, the operands of each instruction belong to the types of data manipulated by the instruction, and the execution stack of the virtual machine is empty at each target switching instruction. Applicants submit that the "modified executable code" may be identified and the software component may be calculated without actually generating the "modified executable code."

The predefined specific use is not limited to the above described example. The specification provides other examples of predefined specific use. For example, in the paragraph bridging pages 13 and 14 of the specification, "modified executable code" may be identified as a code which is optimized to decrease the execution time, in comparison with the original intermediate code CI. The first full paragraph of page 14 of the specification provides another example of a predefined specific use, according to which, the "modified executable code" may be identified as a code which uses less memory space.

In particular, the "modified executable code" may have the function of replacing a series of instructions with a replacement code. See, for example, the

specification: page 14, line 25 - page 15, line 5. According to exemplary embodiments of the invention, a target, or a modified executable code, is identified before the software component CL is calculated. Accordingly, the "modified executable code" does not need to be generated before calculating the software component CL.

The Examiner asserts that the step of generating the modified intermediate code is omitted from the claim. As discussed above, there is no requirement that the modified code be generated off-card before the software component is calculated. As such, the claim does not need to recite such a step.

Rather, the modified code is generated on-card, after the original code and the component CL have been downloaded. To this end, claim 1 recites the on card step of applying the software component to the original code, so as to produce the modified intermediate code for execution by the microprocessor.

Accordingly, the step of generating the modified intermediate code is included in the claim, in the context of an on-card operation.

In view of the foregoing, Applicants respectfully request that rejection of claim 1, under 35 U.S.C. §112, first and second paragraphs, be withdrawn.

Claim Objection

In numbered paragraph 7 of the specification, claims 1, 4 and 5 are objected to.

The Examiner's concern is addressed by amendments in claims 1, 4 and 5. In view of the foregoing, Applicants respectfully request that the objection to claims 1, 4 and 5 be withdrawn.

C O N C L U S I O N

From the foregoing, further and favorable action in the form of a Notice of

Allowance is submitted to be in order, and such action is earnestly solicited.

In the event that there are any questions concerning this amendment, or the

application in general, the Examiner is respectfully requested to telephone the

undersigned so that prosecution of present application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: <u>April 25, 2010</u>   By: _____

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